

English translation of the claims annexed to the IPER

Claims

1. In-vitro method for the identification and/or quantification of guanylate binding protein-1 or fragments of this protein in the culture supernatant of a tissue sample, a body fluid sample or a sample from a cell culture supernatant, wherein the method comprises the steps of:
 - (a) contacting the sample with a first receptor which specifically binds guanylate binding protein-1 or a fragment of this protein; and
 - (b) detection of a specific binding of the receptor with guanylate binding protein-1 or a fragment of this protein.
2. The method according to claim 1, furthermore comprising step (a') or (a'') prior to contacting with the first receptor:
 - (a') labelling the proteins contained in the sample; or
 - (a'') labelling the first receptor.
3. The method according to claim 1 or 2, wherein the receptor is immobilised on a surface prior to contacting with guanylate binding protein-1 or fragments of this protein.
4. The method according to claim 1 or 2, wherein the receptor is immobilised on a surface after contacting with guanylate binding protein-1 or of fragments of this protein.
5. The method according to any one of claims 3 or 4, wherein the material of the surface is selected from a group consisting of sepharose, latex, glass, polystyrene, polyvinyl, nitrocellulose and silicon.
6. The method according to any one of claims 3 to 5, wherein the surface is a membrane, a bead, a chip or a plate.
7. The method according to claim 6, furthermore comprising the step (a''') prior to the step of detection of a specific binding:

- (a''') precipitating the beads with the complexes which are bound thereto of the first receptor and guanylate binding protein-1 or a fragment of this protein.
8. The method according to claim 7, wherein the detection of the specific binding in step (b) comprises a gel electrophoretic cleavage, optionally, furthermore, a Western blot analysis.
 9. The method according to any one of claims 1 to 8, wherein for the detection of a specific binding of guanylate binding protein-1 or a fragment of this protein with the first receptor in step (a), the sample is contacted with a second receptor for guanylate binding protein-1 or a fragment of this protein, which binds to an epitope of guanylate binding protein-1 or a fragment of this protein, which is accessible after the binding of the first receptor to guanylate binding protein-1 or a fragment of this protein.
 10. The method according to claim 9, wherein the second receptor for guanylate binding protein-1 or fragments of this protein is/are labelled.
 11. The method according to claim 10, wherein the labelling of the second receptor for guanylate binding protein-1 or a fragment of this protein comprises a system emitting a signal or which is specifically recognised by a further, third receptor comprising a system emitting a signal.
 12. The method according to claim 11, wherein the system emitting a signal comprises an enzyme emitting this signal.
 13. The method according to any one of claims 9 to 12, wherein the first and the second receptor and, optionally, also the third receptor, are selected from the group consisting of peptides, polypeptides, low-molecular substances, antibodies or fragments or derivatives thereof and aptamers.
 14. The method according to any one of claims 1 to 13, wherein the method is an ELISA, an EIA or a RIA.
 15. The method according to any one of claims 1 to 14, wherein the method is carried out automatically.